

REPORT DOCUMENTATION PAGE

AFRL-SR-BL-TR-01-

0114

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the gathering and maintaining the data needed, and completing and reviewing the collection of information. Send collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Project, Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE	3. REPORT TYPE AND DATES COVERED Final - 1 May 2000 - 31 October 2000	
4. TITLE AND SUBTITLE 2000 Gordon Research Conference on Electrodeposition			5. FUNDING NUMBERS F49620-00-1-0295	
6. AUTHOR(S) Dr. John Stickney				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Gordon Research Conference Inc P.O. Box 984 West Kingston, RI 02892-0984			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) AFOSR/NL 801 North Randolph Street, Room 732 Arlington, VA 22203-1977			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED			<p>AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR) NOTICE OF TRANSMITTAL DTIC. THIS TECHNICAL REPORT HAS BEEN REVIEWED AND IS APPROVED FOR PUBLIC RELEASE LAW AFFR 160-12. DISTRIBUTION IS UNLIMITED.</p>	
13. ABSTRACT (Maximum 200 words) The Gordon Research Conference (GRC) on Electrodeposition was held at Colby-Sawyer College, New London, NH, August 13-18, 2000. The conference was well attended with 106 participants. The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both US and foreign scientists, senior researchers, young investigators, and students. In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.				
14. SUBJECT TERMS 20010305 054			15. NUMBER OF PAGES 14	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclas	18. SECURITY CLASSIFICATION OF THIS PAGE Unclas	19. SECURITY CLASSIFICATION OF ABSTRACT Unclas	20. LIMITATION OF ABSTRACT	



GORDON RESEARCH CONFERENCES *frontiers of science*

P.O. Box 984, WEST KINGSTON, RI 02892-0984

PHONE: 401 783-4011 • FAX: 401 783-7644

E-MAIL: grc@grcmail.grc.uri.edu

WORLD WIDE WEB: <http://www.grc.uri.edu>

2000 GORDON RESEARCH CONFERENCE

on Electrodeposition

FINAL PROGRESS REPORT

AFOSR

F49620-00-1-0295

The Gordon Research Conference (GRC) on Electrodeposition was held at Colby-Sawyer College, New London, NH, August 13-18, 2000. The conference was well attended with 106 participants (list enclosed). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both US and foreign scientists, senior researchers, young investigators, and students.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field (program enclosed).

I want to personally thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Dr. John Stickney
Conference Chair

BOARD OF TRUSTEES: Chair / VICKI CHANDLER • Vice Chair / PAUL ORTIZ DE MONTELLANO • JAMES BRISTOL • SUSAN COPPERSMITH • HARRY B. GRAY
CAROL HANDWERKER • PETER KNOWLES • RICHARD NICHOLSON • MARK RATNER • DAGMAR RINGE • ROBERT SILBEY • PALMER TAYLOR • BARBARA K. VONDERHAAR
DIRECTOR / CARLYLE B. STORM • **DIRECTOR EMERITUS /** ALEXANDER M. CRUICKSHANK

Gordon Research Conference on Electrodeposition

August 13 – 18, 2000,

Colby Sawyer College, New London, New Hampshire

Chairman: **John Stickney**, University of Georgia

Vice Chairman **Dan Schwartz**, University of Washington

Sunday, 4:00-6:00 Chairman's Reception for All Attendees

Sunday, 7:30

Magnetic Materials/CMP

Discussion Leader: **Larry Bottomley**, Georgia Institute of Technology

7:30pm **Alexander Bittner**, Max-Planck-Institut fuer Festkoerperforschung
"Electrodeposition and Self-Assembled Monolayers"

8:30pm **Gutmann, Ronald**, Rensselaer Polytechnic Institute

"Chemical-Mechanical Planarization (CMP) for Cu Damascene Patterning:
Trends, Metrics, Mechanisms and Cu-Deposition/Annealing Dependence"

Monday, 9:00am

Cu and VLSI

Discussion Leader: **Alan West**, Columbia University

9:00am **Panayotis Andricacos**, IBM

"Aspects of Copper Electrodeposition and Its Use in Semiconductor Fabrication"

10:00am Coffee Break

10:15am **Mihal Gross**, Bell Labs, Lucent Technologies

"Texture and Recrystallization in Electroplated Copper for Advanced Interconnects"

11:15am **Steven Mayer**, Novellus Systems

"VLSI Copper: The Electrodeposition Challenges"

4:00-6:00pm Poster Session, A

Monday 7:30pm

MEMS

Discussion Leader: **Dan Schwartz**, University of Washington

7:30pm **Kevin Kelly**, Louisiana State University

"Electroplated micro heat exchangers for gas turbine components and mechanical seals"

8:30pm **Sudipta Roy**, University of Newcastle, "Development of Gold

Electrodeposition Technology for Opto-Electronic Devices"

Tuesday 9:00am

Magnetic Materials

Discussion Leader: **Peter Searson**, Johns Hopkins University

9:00am **Walter Schwarzacher**, University of Bristol

"Pulse deposition of magnetic nanostructures"

10:00am Coffee Break

10:15am **Werner Schindler**, University of Karlsruhe

"Nanoscale electrodeposition of Co clusters"

11:15am **Tetsuya Osaka**, Waseda University

"New Creation of soft magnetic materials by electrodeposition for high magnetic recording."

4:00-6:00pm Poster Session, A

Tuesday 7:30pm **Semiconductors**

Discussion Leader: **Luisa Foresti**, University of Florence

7:30pm **Jay Switzer**, University of Missouri-Rolla

"Electrodeposited single crystals"

8:30pm **Curtis Shannon**, Auburn University

"Electrochemical ALE as a Route to Low-Dimensional Materials"

Wednesday 9:00am **Surface Characterization**

Discussion Leader: **Manny Soriaga**, Texas A&M University

9:00am **Klaus Wandelt**, University of Bonn

"Atomic-scale characterization of solid/electrolyte interfaces"

10:00am Coffee Break

10:15am **Werner Freyland**, University of Karlsruhe

"Electrochemical Phase formation and Phase transitions at Metal-Molten Salt Interfaces: ES-STM and Spectroscopic Studies"

11:15am **Karl Sieradzki**, Arizona State University

"Surfactant and defect-mediated electrochemical thin film growth"

4:00-6:00pm Poster Session, B

Wednesday 7:30pm **Fundamentals**

Discussion Leader: **Benjamin Scharifker**, Universidad Simon Bolivar

7:30pm **Juan Feliu**, Universidad de Alicante

"Adsorption properties and reactivity of Pt single crystals"

8:30pm **Eliezer Gileadi**, Tel Aviv University

"Mechanistic studies of the early stages of metal deposition employing the EQCM"

Thursday 9:00am **Nanostructures**

Discussion Leader: **Mike Sailor**, University of California, San Diego

9:00am **Jean-Claude Bradley**, Drexel University

"Bipolar Electrochemistry: Applications in Catalysis and Materials Science"

10:00am Coffee Break

10:15am **Jean Philippe Ansermet**, EPFL Lausanne

"Nanostructuring ferromagnets by template synthesis, probing the fundamentals of magnetism"

11:15am **Bernhard Gollas**, University of Southampton

"Nanostructured metal films from lyotropic liquid crystalline templates"

4:00-6:00pm Poster Session, B

Thursday 7:30pm **Short Talks**

Discussion Leader: **Dan Schwartz**, University of Washington

Conference Registration List

ELECTRODEPOSITION

Colby-Sawyer: 8/13/00 thru 8/18/00

JOSEPH A ABYS LUCENT TECHNOLOGIES 236 RICHMOND VALLEY ROAD STATEN ISLAND, NY 10309	Phone: 718-317-4490 Fax: 718-317-4439 Email: JABYS@LUCENT.COM Participation: Attendee
PANAYOTIS C ANDRICACOS T.J. WATSON RESEARCH CENTER IBM CORPORATION P.O. BOX 218, 04-204 RM 36-161 YORKTOWN HEIGHTS, NY 10598-0218	Phone: 914-945-2683 Fax: 914-945-4520 Email: NDRICAC@US.IBM.COM Participation: Speaker
JEAN-PHILLIP ANSERMET ECOLE POLYTECHNIQUE FEDERALE LAUSANNE INSTITUT DE PHYSIQUE EXPERIMENTALE PHB-ECUBLENS LAUSANNE, VAUD CH-1015 SWITZERLAND	Phone: 41-216933339 Fax: 41-216933604 Email: ANSERMET@IPE.DP.EPFL.CH Participation: Speaker
KAREN ATTENBOROUGH IMEC VZW (INTERUNIVERSITY MICROELECTRONICS CENTER) MCP/ MAGNETO-ELECTRONICS KAPELDREEF 75 LEUVEN, B-3001 BELGIUM	Phone: 32-16-28-16-83 Fax: 32-16-281-501 Email: karena@imec.be Participation: Poster Presenter
DALE P BARKEY UNIVERSITY OF NEW HAMPSHIRE DEPARTMENT OF CHEMICAL ENGINEERING KINGSBURY HALL DURHAM, NH 03824	Phone: 603-862-1918 Fax: 603-862-3747 Email: DPB@KEPLER.UNH.EDU Participation: Attendee
SHANE D BEATTIE DALHOUSIE UNIVERSITY DEPARTMENT OF PHYSICS SIR JAMES DUNN BUILDING HALIFAX, NS B3H 3J5 CANADA	Phone: 902-494-2991 Fax: 902-494-5191 Email: SHANEBEATTIE@HOTMAIL.COM Participation: Attendee
UGO BERTOCCI NIST NIST GAITHERSBURG, MD 20899-8551	Phone: 301-975-6402 Fax: 301-926-7679 Email: BERTOCCI@NIST.GOV Participation: Attendee
MASSIMILIANO BESTETTI POLYTECHNIC OF MILAN VIA MANCINELLI 7 MILAN, 20131 ITALY	Phone: 39-2-2399-3102 Fax: 39-02-2399-3180 Email: BESTETTI@CHFI.POLIMI.IT Participation: Attendee
JOHN P BIRTLES TUFTS UNIVERSITY DEPARTMENT OF CHEMISTRY 62 TALBOT AVENUE MEDFORD, MA 02155	Phone: 617-627-5308 Fax: 617-627-3443 Email: JBIRTLES@EMERALD.TUFTS.EDU Participation: Attendee

ALEXANDER M BITTNER
MAX-PLANCK-INSTITUT
MPI FKF, HEISENBERGSTR. 1
STUTT GART, D-70569 GERMANY

Phone: 49-711-689-1433
Fax: 49-711-689-1079
Email: BITTNER@KERN.MPI-
STUTT GART.MPG.DE
Participation: Speaker

LAWRENCE A BOTTOMLEY
GEORGIA INSTITUTE OF TECHNOLOGY
SCHOOL OF CHEMISTRY & BIOCHEMISTRY
ATLANTA, GA 30332

Phone: 404-894-4014
Fax: 404-894-7452
Email: LAWRENCE.BOTTOMLEY@CHEMISTRY.
GATECH.EDU
Participation: Discussion Leader

JEAN-CLAUDE BRADLEY
DREXEL UNIVERSITY
DEPARTMENT OF CHEMISTRY
32ND AND CHESNUT STREETS
PHILADELPHIA, PA 19104

Phone: 215-895-2647
Fax: 215-893-3699
Email: BRADLEJC@POST.DREXEL.EDU
Participation: Speaker

STANKO R BRANKOVIC
BROOKHAVEN NATIONAL LABORATORY
DEPARTMENT OF APPLIED SCIENCES
BUILDING 555
UPTON, NY 11973-500

Phone: 631-344-8444
Fax: 631-344-5815
Email: STANKO@BNL.GOV
Participation: Poster Presenter

BRUCE L BURTON
HUNTSMAN
7114 NORTH LAMAR BOULEVARD
AUSTIN, TX 78752

Phone: 512-483-0148
Fax:
Email: BRUCE_BURTON@HUNTSMAN.COM
Participation: Attendee

YANG CAO
COLUMBIA UNIVERSITY
DEPARTMENT OF CHEMICAL ENGINEERING
NEW YORK, NY 10027

Phone: 212-854-4463
Fax: 212-854-3054
Email: YC174@COLUMBIA.EDU
Participation: Poster Presenter

ARNALDO CARRASQUILLO
UNIVERSITY OF PUERTO RICO
DEPT OF CHEMISTRY
P O BOX 9019
MAYAGUEZ, PR 00691-9019

Phone: 787-832-4040 X2386
Fax: 787-265-3849
Email: CARRASQUILLO@UPRM.EDU
Participation: Attendee

CHIH-HUNG (A CHANG
OREGON STATE UNIVERSITY
DEPARTMENT OF CHEMICAL ENGINEERING
CORVALLIS, OR 97331

Phone: 541-737-8548
Fax: 541-737-4600
Email: CHANGCH@CHE.ORST.EDU
Participation: Attendee

GREGORY A CLAYSON
NORTH CAROLINA STATE UNIVERSITY
201 RIDDICK HALL
RALEIGH, NC 27606

Phone: 919-513-1137
Fax: 919-515-3465
Email: GACLAYSO@EOS.NCSU.EDU
Participation: Attendee

SYLVAIN CRUCHON-DUPEYRAT
WAYNE STATE UNIVERSITY
DEPARTMENT OF CHEMISTRY 75
5101 CASS AVENUE
DETROIT, MI 48201

Phone: 313-577-0482
Fax: 313-577-8822
Email: SCD@CHEM.WAYNE.EDU
Participation: Poster Presenter

KURT H DAVIS
UNIVERSITY OF GEORGIA
DEPARTMENT OF CHEMISTRY
ATHENS, GA 30605

Phone:
Fax:
Email: kewl@ck@arches.uga.edu

Participation: Attendee

JEROME V DOLLET
AIR LIQUIDE
CRCD
BP 126
JOUY EN JOSAS, 78353 FRANCE

Phone: 33-1-39-07-60-18
Fax: 33-1-39-07-64-66
Email: jerome.dollet@airliquide.com

Participation: Attendee

LAURENT DOYEN
AIR LIQUIDE ELECTRONICS
224 BVD J KENNEDY
CORBEIL ESSONNES, 91105 FRANCE

Phone: 33-160-88-65-79
Fax: 33-160-38-50-30
Email: laurent.doyen@altissemiconductor.com

Participation: Attendee

THOMAS S EAGLETON
THE UNIVERSITY OF BIRMINGHAM
DEPARTMENT OF METALLURGY AND MATERIALS
EDGBASTON
BIRMINGHAM, B15 2TT UNITED KINGDOM

Phone: 44-121-414-6752
Fax: 44-121-414-5232
Email: t.s.eagleton@bham.ac.uk

Participation: Poster Presenter

FERESHTEH EBRAHIMI
UNIVERSITY OF FLORIDA
MATERIALS SCIENCE AND ENG DEPT
PO BOX 116400
GAINESVILLE, FL 32611

Phone: 352-846-3791
Fax: 352-846-3355
Email: febra@mse.ufl.edu

Participation: Poster Presenter

GERALD E ENGELMANN
UNIVERSITY OF ULM
DEPT. OF ELECTROCHEMISTRY
ULM, 89069 GERMANY

Phone: 49-731-502542
Fax: 49-731-502540
Email: GERALD.ENGELMANN@CHEMIE.UNI-ULM.DE

Participation: Poster Presenter

JUAN MIGUEL FELIU
UNIVERSIDAD DE ALICANTE
QUIMICA-FISICA
APDO. CORREOS, 99
ALICANTE, 03080 SPAIN

Phone: 34-965909301
Fax: 34-965903537
Email: JUAN.FELIU@UA.ES

Participation: Speaker

ROBERT W FILAS
LUCENT TECHNOLOGIES, BELL LABORATORIES
7E-205,600 MOUNTAIN AVE.
MURRAY HILL, NJ 07974

Phone: 908-582-5382
Fax: 908-582-3958
Email: RWF@LUCENT.COM

Participation: Attendee

BILLY H FLOWERS
UNIVERSITY OF GEORGIA
CHEMISTRY DEPARTMENT
1001 FIELD STREET
ATHENS, GA 30602

Phone: 706-542-9453
Fax:
Email: FLOWERS@SUNCHEM.CHEM.UGA.EDU

Participation: Poster Presenter

M LUISA FORESTI
UNIVERSITY OF FLORENCE
DIPARTIMENTO DI CHIMICA
VIA G CAPPONI 9
FIRENZE, I-50121 ITALY

Phone: 39-55-2757541
Fax: 39-55-244102
Email: foresti@unifi.it

Participation: Discussion Leader

JAN L FRANSAER
KULEUVEN
DEPT. MTM
DE CROYLAAN 2
HEVERLEE, BRABANT 3001 BELGIUM

Phone: 32-16321239
Fax: 32-16321991
Email: JAN.FRANSAER@MTM.KULEUVEN.AC.BE
Participation: Attendee

WERNER FREYLAND
UNIVERSITY OF KARLSRUHE
INST PHYSICAL CHEMISTRY & ELECTROCHEM
KARLSRUHE, D-76128 GERMANY

Phone: 0721-608-2100
Fax: 0721-608-4856
Email: FREY@IPC1IBM1.CHEMIE.UNI-KARLSRUHE.DE
Participation: Speaker

YASUHIRO FUKUNAKA
KYOTO UNIVERSITY
DEPARTMENT OF ENERGY SCIENCE & TECHNOLOGY
YOSHIDA HONMACHI, SAKYO
KYOTO, 606-8501 JAPAN

Phone: 81-75-753-5415
Fax: 81-75-753-4719
Email: FUKUNAKA@ENERGY.KYOTO-U.AC.JP
Participation: Poster Presenter

MOHAMED A GHANEM
UNIVERSITY OF SOUTHAMPTON
CHEMISTRY DEPARTMENT
HIGHFIELD
SOUTHAMPTON, SO17 1BJ UNITED KINGDOM

Phone: 44-023-80594107
Fax: 44-023-80593781
Email: MAG@SOTON.AC.UK
Participation: Poster Presenter

ELIEZER GILEADI
TEL AVIV UNIVERSITY
SCHOOL OF CHEMISTRY
RAMAT-AVIV, 69978 ISRAEL

Phone: 972-3-6407587
Fax: 972-3-6409293
Email: GILEADI@POST.TAU.AC.IL
Participation: Speaker

BERNHARD GOLLAS
UNIVERSITY OF SOUTHAMPTON
DEPARTMENT OF CHEMISTRY
HIGHFIELD
SOUTHAMPTON, SO17-1BJ UNITED KINGDOM

Phone: 02380594107
Fax:
Email: BERNHARD.GOLLAS@SOTON.AC.UK
Participation: Speaker

MIHAL E GROSS
BELL LABS, LUCENT TECHNOLOGIES
ROOM 1D-343
600 MOUNTAIN AVENUE
MURRAY HILL, NJ 07974

Phone: 908-582-4504
Fax: 908-582-2300
Email: MIHAL@LUCENT.COM
Participation: Speaker

RONALD GUTMANN
RENSSELEAR POLYTECHNIC INSTITUTE
CENTER FOR INDUSTRIAL INNOVATION
110 8TH STREET
TROY, NY 12180

Phone: 518-276-6794
Fax:
Email: GUTMAR@RPI.EDU
Participation: Speaker

CHARLIE HARDY
3 M COMPANY
3 M CENTER
BUILDING 201-1W-28
ST PAUL, MN 55144

Phone: 612-737-3044
Fax: 612-737-3044
Email: LCHARDY@MMM.COM
Participation: Attendee

YASUNORI HAYASHI
KYUSHU-UNIVERSITY, HAKOZAKI
DEPT OF MATERIALS SCIENCE & ENGINEERING
FACULTY OF ENGINEERING
FUKUOKA, 812 JAPAN

Phone: 81-92-642-3679
Fax: 81-92-632-0434
Email: HAYASHI@ZAIKO.KYUSHU-U.AC.JP
Participation: Poster Presenter

<p>CHARLES L HUSSEY UNIVERSITY OF MISSISSIPPI DEPARTMENT OF CHEMISTRY UNIVERSITY, MS 38677-9999</p>	<p>Phone: 662-915-7301 Fax: 662-915-7300 Email: CHCLH@CHEM1.OLEMISS.EDU Participation: Attendee</p>
<p>NICK K ITCHEV GILETTE/ DURACELL 37A STREET, THE GILETTE CO NEEDHAM, MA 02494</p>	<p>Phone: 781-455-9442 X442 Fax: Email: nick_itchev@gillette.com Participation: Attendee</p>
<p>STACY J JONES UNIVERSITY OF MISSISSIPPI DEPARTMENT OF CHEMISTRY COULTER HALL, ROOM 359 UNIVERSITY, MS 38677</p>	<p>Phone: 662-915-7605 Fax: 662-915-7300 Email: CHJONES@OLEMISS.EDU Participation: Poster Presenter</p>
<p>JAMES KELLY EPFL DMX-LMCH MX-C-ECUBLENS LAUSANNE, CH-1015 SWITZERLAND</p>	<p>Phone: 41-21-693-3966 Fax: 41-21-693-3946 Email: JAMES.KELLY@EPFL.CH Participation: Poster Presenter</p>
<p>KEVIN W KELLY LOUISIANA STATE UNIVERSITY DEPARTMENT OF MECHANICAL ENGINEERING 2502 CEBA BATON ROUGE, LA 708</p>	<p>Phone: 225-388-5928 Fax: Email: KELLY@ME.LSU.EDU Participation: Speaker</p>
<p>KAZUO KONDO UNIVERSITY OF OKAYAMA DEPARTMENT OF APPLIED CHEMISTRY 3-1-1 TUSHIMA-NAKA OKAYAMA, 700-0082 JAPAN</p>	<p>Phone: 81-86-251-8085 Fax: 81-86-251-8085 Email: kkondo@cc.okayama-u.ac.jp Participation: Poster Presenter</p>
<p>GABRIELA LACCONI CORDOBA UNIVERSITY FACULTY CS. QUIM PAB-ARGENTINA, ALA1 CORDOBA, 5000 ARGENTINA</p>	<p>Phone: 54-351-4334169 Fax: 54-351-4334188 Email: GLACCONI@FISQUIM.FCQ.UNC.EDU.AR Participation: Poster Presenter</p>
<p>DAVID LASHMORE MATERIALS INNOVATION 8 COMMERCE AVENUE WEST LEBANON, NH 03784</p>	<p>Phone: 603-298-8421 Fax: 603-298-8425 Email: DAVID.LASHMORE@MIITECHNOLOGIES.COM Participation: Attendee</p>
<p>MARCUS D LAY UNIVERSITY OF GEORGIA CHEMISTRY BUILDING ROOM 246A ATHENS, GA 30604</p>	<p>Phone: 706-542-9453 Fax: 706-542-9454 Email: MLAY@CHEM.UGA.EDU Participation: Attendee</p>
<p>HYO-JONG LEE SEOUL NATIONAL UNIVERSITY SCHOOL OF MATERIAL SCIENCE & ENGINEERING SGUKUN 9 DONG, KWAN-AK KU SEOUL, 151-742 KOREA</p>	<p>Phone: 82-2-880-7100 Fax: 82-2-885-9671 Email: OCMA@SNU.AC.KR Participation: Poster Presenter</p>

JAE-HO LEE
HONGIK UNIVERSITY
DEPT OF METAL ENG AND MATERIALS
72-1 SANGSU-DONG
MAPO-GU
SEOUL, 121-791 KOREA

Phone: 82-2-320-1483
Fax: 82-2-3142-1711
Email: jhlee@hongik.ac.kr
Participation: Attendee

SOFIA LEOPOLD
UPPSALA UNIVERSITY
ANGSTROM LABORATORY
BOX 538
UPPSALA, 751 21 SWEDEN

Phone: 46-17-471-3735
Fax: 46-18-51-3548
Email: SOFIA.LEOPOLD@KEMI.UU.SE
Participation: Poster Presenter

XUAN LIN
ENTHONE-OMI
193 MARSH HILL ROAD
ORANGE, 06511 CT

Phone: 203-799-4931
Fax: 203-799-4948
Email: XLIN@ENTHONE.COM
Participation: Attendee

RUN LIU
UNIVERSITY OF MISSOURI-ROLLA
MATERIALS RESEARCH CENTER
ROLLA, MO 65401

Phone: 573-341-6943
Fax: 573-341-2071
Email: RLIU@UMR.EDU
Participation: Poster Presenter

GUILLERMO MARSHALL
UNIVERSIDAD DE BUENOS AIRES
FACULTAD DE CIENCIAS EXACTAS Y NATURALES
DEPTO. COMPUTA.
PAB. I, CIUDAD UNIVERSITARIA
BUENOS AIRES, 1428 ARGENTINA

Phone: 54-11-4576-3359
Fax: 54-11-4576-3359
Email: MARSHALG@MAIL.RETINA.AR
Participation: Poster Presenter

MKHULU K MATHE
UNIVERSITY OF GEORGIA
DEPARTMENT OF CHEMISTRY
1001 CEDAR STREET
ATHENS, GA 30601

Phone: 706-542-9453
Fax: 706-542-9454
Email: KMATHE@SUNCHEM.CHEM.UGA.EDU
Participation: Poster Presenter

STEVEN T MAYER
NOVELLUS SYSTEMS
26277 SW 95TH AVENUE
WILSONVILLE, OR 97070-8219

Phone: 503-685-5558
Fax: 503-685-8399
Email: STEVE.MAYER@NOVELLUS.COM
Participation: Speaker

STEVEN J MITCHELL
FLORIDA STATE UNIVERSITY
400 DIRAC SCIENCE LIBRARY
TALLAHASSEE, FL 32306

Phone: 850-644-6263
Fax:
Email: MITCHELL@CSIT.FSU.EDU
Participation: Attendee

THOMAS P MOFFAT
NIST
BUILDING 224, B166
GAITHERSBURG, MD 20899-3956

Phone: 301-975-2143
Fax: 301-926-7679
Email: TMOFFAT@NIST.GOV
Participation: Attendee

MASATSUGU MORIMITSU
KYUSHU INSTITUTE OF TECHNOLOGY
1-1 SENSUI
KITAKYUSHU, FUKUOKA 8048550 JAPAN

Phone: 93-8843309
Fax: 93-8843309
Email: MORIMIZ@CHE.KYUTECH.AC.JP
Participation: Poster Presenter

SYLVIE MORIN
YORK UNIVERSITY
DEPARTMENT OF CHEMISTRY
4700 KEELE STREET
TORONTO, ON M3J 1P3 CANADA

Phone: 416-736-2100 X 22303
Fax: 416-736-5936
Email: SMORIN@YORKU.CA
Participation: Poster Presenter

RONALD J MORRISSEY
TECHNIC, INC.
1 SPECTACLE STREET
CRANSTON, RI 02910-1032

Phone: 401-781-6100
Fax: 401-781-2890
Email: RESEARCH@TECHNIC.COM
Participation: Attendee

GHOLAMREZA G NABIYOUNI
UNIVERSITY OF BRISTOL
H.H. WILLS PHYSICS LABORATORY, ROOM G.54
TYNDALL AVENUE
BRISTOL, BS8 1TL UNITED KINGDOM

Phone: 44-117-9288951
Fax: 44-117-9255624
Email: G.NABIYOUNI@BRIS.AC.UK
Participation: Poster Presenter

IRIS NANDHAKUMAR
UNIVERSITY OF SOUTHAMPTON
DEPARTMENT OF CHEMISTRY
HIGHFIELD
SOUTHAMPTON, HAMPSHIRE SO17 1BJ UNITED KINGDOM

Phone: 44-23-80-59-4096
Fax: 44-23-80-67-6960
Email: iris@soton.ac.uk
Participation: Poster Presenter

MADHAVAN NARAYANAN
WAYNE STATE UNIVERSITY
DEPARTMENT OF CHEMISTRY
ROOM 75
5101 CASS AVENUE
DETROIT, MI 48202

Phone: 313-577-0482
Fax:
Email: MNARAYAN@CHEM.WAYNE.EDU
Participation: Poster Presenter

CORA O'REILLY
TRINITY COLLEGE DUBLIN
PHYSICS DEPARTMENT
DUBLIN 2, IRELAND

Phone: 353-(0)1-608-2171
Fax: 353-1-671-1759
Email: OREILLY2@TCD.IE
Participation: Poster Presenter

TETSUYA OSAKA
WASEDA UNIVERSITY
SCHOOL OF SCIENCE AND ENGINEERING
OKUBO 3-4-1, SHINJUKU-KU
TOKYO, 169-8555 JAPAN

Phone: 81-3-52863202
Fax: 81-3-32052074
Email: OSAKATET@MN.WASEDA.AC.JP
Participation: Speaker

DAVID J PENA
PENN STATE UNIVERSITY
152 DAVEY LAB
BOX 61
UNIVERSITY PARK, PA 16802

Phone: 814-863-8038
Fax: 814-865-1924
Email: DJP13@PSU.EDU
Participation: Poster Presenter

RAMAKRISHNAN RAJAGOPALAN
UNIVERSITY OF CINCINNATI
498 RHODES HALL
MATERIALS SCIENCE AND ENGINEERING
CINCINNATI, OH 45221

Phone: 513-556-6038
Fax:
Email: rajagorn@email.uc.edu
Participation: Poster Presenter

SUDIPTA ROY
UNIVERSITY OF NEWCASTLE
DEPARTMENT OF CHEMICAL & PROCC. ENGIN.
MERZ COURT
NEWCASTLE, NE1 7RU UNITED KINGDOM

Phone: 44-191-222-7274
Fax: 44-191-222-5292
Email: S.ROY@NCL.AC.UK
Participation: Speaker

KHALED M SABER
NORTH CAROLINA STATE UNIVERSITY
MATERIALS SCIENCE ENGINEERING DEPARTMENT
RALEIGH, NC 27695

Phone: 919-515-3853
Fax: 919-515-7724
Email: KMSABER@UNITY.NCSU.EDU
Participation: Attendee

MICHAEL J SAILOR
UNIVERSITY OF CALIFORNIA, SAN DIEGO
DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY
9500 GILMAN DRIVE, DEPT. 0358
LA JOLLA, CA 92093-0358

Phone: 619-534-8188
Fax: 619-534-5383
Email: MSAILOR@UCSD.EDU
Participation: Discussion Leader

BENJAMIN R SCHARIFKER
UNIVERSIDAD SIMON BOLIVAR
DEPARTAMENTO DE QUIMICA
APARTADO 89000
CARACAS, 1080A VENEZUELA

Phone: 58-29063980
Fax: 58-29063969
Email: BENJAMIN@USB.VE
Participation: Discussion Leader

WERNER SCHINDLER
UNIVERSITY OF KARLSTUHE
HIGH FREQUENCY & QUANTUM ELECTRONICS LABORATORY
KAISERSTRASSE 12
KARLSRUHE, 76131 GERMANY

Phone: 49-721-608-7170
Fax: 49-721-608-2786
Email: WERNER.SCHINDLER@ETEC.UNI-KARLSRUHE.DE
Participation: Speaker

DANIEL SCHWARTZ
UNIVERSITY OF WASHINGTON
DEPARTMENT OF CHEMICAL ENGINEERING
BOX 351750
SEATTLE, WA 98195-1750

Phone: 206-685-4815
Fax: 206-685-3451
Email: DTS@U.WASHINGTON.EDU
Participation: Vice Chair

WALTHER SCHWARZACHER
UNIVERSITY OF BRISTOL
H H WILLS PHYSICS LAB
TYNDALL AVENUE
BRISTOL, BS8 1TL UNITED KINGDOM

Phone: 44-117-9288709
Fax: 44-117-9255624
Email: W.SCHWARZACHER@BRISTOL.AC.UK
Participation: Speaker

PETER SEARSON
THE JOHNS HOPKINS UNIVERSITY
DEPT OF MATERIALS SCIENCE & ENGINEERING
BALTIMORE, MD 21218

Phone: 410-516-8774
Fax: 410-516-5293
Email: SEARSON@JHU.EDU
Participation: Discussion Leader

LAURENT SERVANT
LABORATOIRE DE PHYSICO-CHEMIE MOLECULAIRE
351 COURS DE LA LIBERATION
TALENCE, 33405 FRANCE

Phone: 33-556-84-64-16
Fax: 33-556-84-84-02
Email: LAURENT@MORGANE.LSMC.U-BORDEAUX.FR
Participation: Poster Presenter

CURTIS SHANNON
AUBURN UNIVERSITY
DEPARTMENT OF CHEMISTRY
CB179
AUBURN, AL 36849-5312

Phone: 334-844-6964
Fax: 334-844-6959
Email: SHANNCG@MAIL.AUBURN.EDU
Participation: Speaker

MUTSUHIRO SHIMA
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
77 MASSACHUSETTS AVENUE
DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING
13-4038
CAMBRIDGE, MA 02139-4307

Phone: 617-253-6891
Fax: 617-252-1020
Email: SHIMA@MIT.EDU
Participation: Attendee

GARY A SHREVE
3M
6801 RIVER PLACE BOULEVARD
A143-5N-01
AUSTIN, TX 78729

Phone: 512-984-5557
Fax: 512-984-5285
Email: GSHREVE@MMM.COM
Participation: Attendee

KARL SIERADZKI
ARIZONA STATE UNIVERSITY
DEPT. MECHANICAL & AEROSPACE ENGINEERING
P.O. BOX 876106
TEMPE, AZ 85287

Phone: 480-965-8990
Fax: 480-965-1384
Email: KARL@ICARUS.EAS.ASU.EDU
Participation: Speaker

DINESH K SOOD
ROYAL MELBOURNE INSTITUTE OF TECHNOLOG
124 LA TROBE STREET
SCHOOL OF ELECTRICAL AND COMPUTER SYSTEMS ENGINEERING
MELBOURNE, 3134 AUSTRALIA

Phone: 613-9925-2620
Fax: 613-9662-1060
Email: DSOOD@RMIT.EDU.AU
Participation: Poster Presenter

THOMAS A SORENSON
UNIVERSITY OF MISSOURI ROLLA
MATERIALS RESEARCH CENTER
ROLLA, MO 65409

Phone: 573-341-6943
Fax: 573-341-2071
Email: SORENSON@UMR.EDU
Participation: Poster Presenter

MANUEL P SORIAGA
TEXAS A&M UNIVERSITY
DEPARTMENT OF CHEMISTRY
MS 3255
COLLEGE STATION, TX 77843

Phone: 409-845-1846
Fax: 409-845-3523
Email: SORIAGA@MAIL.CHEM.TAMU.EDU
Participation: Discussion Leader

NATTAPONG SRISOOK
UNIVERSITY OF GEORGIA
109 COLLEGE STATION RD, APT J311
ATHENS, GA 30605

Phone: 706-613-1135
Fax:
Email: nsrisook@sunchem.chem.uga.edu
Participation: Attendee

GERY R STAFFORD
NIST
ELECTRODEPOSITION GROUP
BUILDING 224, ROOM B166
GAITHERSBURG, MD 20899

Phone: 301-975-6412
Fax: 301-926-7679
Email: GERY.STAFFORD@NIST.GOV
Participation: Poster Presenter

EUGENE STEP
SHIPLEY
455 FOREST STREET
MARLBOROUGH, MA 01752

Phone: 508-229-7369
Fax: 508-481-1937
Email: estep@shipley.com
Participation: Poster Presenter

JOHN L STICKNEY
UNIVERSITY OF GEORGIA
DEPARTMENT OF CHEMISTRY
ATHENS, GA 30602-2556

Phone: 706-542-1967
Fax: 706-542-9454
Email: STICKNEY@SUNCHEM.CHEM.UGA.EDU
Participation: Chair

JAY A SWITZER
UNIVERSITY OF MISSOURI-ROLLA
DEPARTMENT OF CHEMISTRY
103 MATERIALS RESEARCH CENTER
ROLLA, MO 65401-1170

Phone: 573-341-4383
Fax: 573-341-2071
Email: JSWITZER@UMR.EDU
Participation: Speaker

YONGSUG TAK INHA UNIVERSITY DEPARTMENT OF CHEMICAL ENGINEERING 253 YONGHYUN-DONG, NAM-KU INCHON, 402-751 KOREA	Phone: 82-32-8607471 Fax: 82-32-872-0959 Email: YSTAK@INHA.AC.KR Participation: Poster Presenter
NAO TAKANO WASEDA UNIVERSITY OKUBO 3-4-1, SHINJUKU-KU TOKYO, 169-8555 JAPAN	Phone: 81-352863202 Fax: 81-332052074 Email: NTAKANO@MN.WASEDA.AC.JP Participation: Poster Presenter
JAN B TALBOT UNIVERSITY OF CALIFORNIA, SAN DIEGO DEPT OF AMES/CHEMICAL ENGINEERING 9500 GILMAN DRIVE LA JOLLA, CA 92093-0411	Phone: 619-534-3176 Fax: 619-534-4543 Email: JTALBOT@UCSD.EDU Participation: Attendee
RAMAN VAIDYANATHAN UNIVERSITY OF GEORGIA DEPARTMENT OF CHEMISTRY 1001 CEDAR STREET ATHENS, GA 30605	Phone: 706-542-9453 Fax: Email: RVAIDY@SUNCHEM.CHEM.UGA.EDU Participation: Poster Presenter
KRIS VARAZO THE UNIVERSITY OF GEORGIA DEPT OF CHEMISTRY ATHENS, GA 30602	Phone: 706-542-9453 Fax: 706-542-9454 Email: VARAZO@SUNCHEM.CHEM.UGA.EDU Participation: Poster Presenter
TRAVIS L WADE UNIVERSITY OF GEORGIA DEPARTMENT OF CHEMISTRY 1001 CEDAR STREET ATHENS, GA 30601	Phone: 706-542-9453 Fax: 706-542-9454 Email: WADE@SUNCHEM.CHEM.UGA.EDU Participation: Poster Presenter
KLAUS WANDEL INST. PHYSIKALISCHE CHEM WEGELERSTR 12 BONN, D53115 GERMANY	Phone: 0049-228-732213 Fax: 0049-228-732515 Email: K.WANDEL@UNI-BONN.DE Participation: Speaker
WEIJUA WANG UNIVERSITY OF WASHINGTON DEPARTMENT OF CHEMICAL ENGINEERING BOX 351750 SEATTLE, WA 98195	Phone: 206-685-8789 Fax: Email: WEIHUA@U.WASHINGTON.EDU Participation: Poster Presenter
LINDELL C WARD UNIVERSITY OF GEORGIA DEPT. OF CHEMISTRY ATHENS, GA 30602	Phone: 706-542-9453 Fax: 706-542-9454 Email: LWARD@SUNCHEM.CHEM.UGA.EDU Participation: Poster Presenter
ALAN WEST COLUMBIA UNIVERSITY DEPARTMENT OF CHEMICAL ENGINEERING 918 MUDD BUILDING NEW YORK, NY 10027	Phone: 212-854-4452 Fax: 212-854-3054 Email: ACW17@COLUMBIA.EDU Participation: Discussion Leader

KAZIMIERZ WIKIEL
TECHNIC, INC
1 SPECTACLE STREET
CRANSTON, RI 02910

Phone: 401-785-8732
Fax: 401-781-2890
Email: kazekw@aol.com

Participation: Attendee

BILL WU
MILLIPORE CORP
80 ASHBY ROAD
BEDFORD, MA 01730

Phone: 781-533-2730
Fax: 781-533-3195
Email: Bill_wu@millipore.com

Participation: Attendee

YUNG-HERNG YAU
BETHLEHEM STEEL CO.
HOMER RESEARCH LABORATORIES
BETHLEHEM, PA 18016

Phone: 610-694-1431
Fax: 610-694-1739
Email: YHYAU@BSCO.COM

Participation: Attendee

MICHAEL P ZACH
UC, IRVINE
CHEMISTRY DEPARTMENT
516 ROWLAND HALL
IRVINE, CA 92697

Phone: 949-824-2612
Fax:
Email: MZACH@UCI.EDU

Participation: Poster Presenter

GIOVANNI ZANGARI
UNIVERSITY OF ALABAMA
MTE DEPT.
P.O. BOX 870202
TUSCALOOSA, AL 35487

Phone: 205-348-7074
Fax: 205-348-2164
Email: GZANGARI@COE.ENG.UA.EDU

Participation: Attendee

YUN ZHANG
LUCENT TECHNOLOGIES EC&S
236 RICHMOND VALLEY ROAD
STATEN ISLAND, NY 10309-2620

Phone: 718-317-4419
Fax: 718-317-4439
Email: YZHANG@LUCENT.COM

Participation: Attendee

QUN ZHU
UNIVERSITY OF MISSISSIPPI
P.O. BOX 4411
UNIVERSITY, MS 38677

Phone: 662-915-7605
Fax: 662-915-7300
Email: QZHU@OLEMISS.EDU

Participation: Poster Presenter